



Materials Safety

Proper Disposal of Waste Contaminated with Hazardous Solvents

A Message from Rick Kelly

Many of us work with hazardous materials in our research programs. We must remember that we are responsible for protecting ourselves, other Lab employees and the environment

from the harmful effects of these materials. This responsibility also extends beyond the world of our laboratories and into our daily lives.

—Paul Alivisatos,
Division Director



Incident:

Recently, a janitor in building 66 was made ill by the vapors released from solvent-soaked polishing cloths that had been improperly tossed in a general trash can in the hallway. As the janitor removed the bag from the trashcan, she inhaled concentrated solvent vapor that caused her to feel faint and nauseous.

As this occurred after 5 pm, the Fire Department responded to evaluate her. The paramedics provided supplemental oxygen and later released her to return to work. A follow up investigation indicated that the polishing pads were saturated with acetone and were generated in a nearby laboratory.

Review:

This incident resulted in an illness to a lab employee. In addition, had the materials in the trashcan been collected and transported off site, this would have constituted illegal disposal of hazardous waste. Acetone is extremely flammable, and had someone placed a hot item in this hallway trashcan a fire might have erupted.

The work that generated these solvent soaked pads was not well conceived, and had not been reviewed by EH&S, the Division EH&S Manager or line management. Acetone was being squirted or poured directly onto the bench top in this process. Inhalation exposure was unavoidable and fire was a real possibility.

Actions:

Acetone and most other organic solvents are hazardous and must be disposed of as hazardous waste. Unless the

solvent has completely evaporated, items wetted with these solvents must also be treated as hazardous waste. Never toss any material that is even slightly wet with organic solvents into the general trash. Such items

**The key word is THINK.
Where should I put those
solvent-soaked cloths?
In the open trash?**

should be packaged as hazardous waste, labeled and stored in the lab satellite waste accumulation area (SAA).

Significant new operations involving hazardous materials should be reviewed by the PI and either Rick Kelly (Division EH&S Manager), Paul Johnson (MSD EH&S Technician) or John Seabury (EH&S Division Liaison). The use of highly volatile solvents should generally be performed in a laboratory fume hood. Operations should not be designed that require the application of flammable solvent directly to the laboratory bench top.